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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/714,424 | 11/16/2000 | Carl J. Serman | 1836-001630 | 4138 |

7590

08/14/2002

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| EXAMINER |
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KUHNS, ALLAN R

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| ART UNIT | PAPER NUMBER |
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1732

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DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

1-D

Office Action Summary

Application No.

09/714,424

Applicant(s)

SERMAN ET AL.

Examiner

KUHNS

Group Art Unit

1732

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.
- Of the above claim(s) 16-18 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10, 12-15 AND 19 is/are rejected.
- ☒ Claim(s) 11 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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1. The invention groupings in the following restriction requirement have been reconstituted (compared to the groupings given at the time a telephone restriction call was made) in order to place generic claims 1-14 and 19 with elected claim 15.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15 and 19, drawn to a method of manufacturing a microcellular polyurethane foam, classified in class 264, subclass 54.
- II. Claim 16, drawn to a solid circular tire for attachment to a bowling ball lift wheel, classified in class 428, subclass 304.4.
- III. Claims 17-18, drawn to a method of making and using a solid circular tire, classified in class 29, subclass 527.1.

3. The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed, or as imputed from the steps practiced, can be made by another and materially different process such as by removing material from a block of microcellular polyurethane foam to form a tire-shaped article.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the

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product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as one wherein the product tire is placed on a wheelbarrow which is used to transport soil.

Inventions I and III are related as a process of making a product and a process of making and using a product. These inventions are distinct because (1) the product structure can be formed by a materially different process such as one in which material is removed from a block of microcellular polyurethane foam to form a tire-shaped article, and (2) the product structure as claimed, or as imputed from the steps practiced, can be used in a materially different process of using that product such as one wherein the product tire is placed on a wheelbarrow which is used to transport soil.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art requiring divergent fields of search for the respective inventions, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Barbara Johnson on August 2, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claim 15 (generic claims 1-14 and 19 have been included in this grouping). Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10, 12-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Younes. Younes discloses the basic claimed method of manufacturing a microcellular polyurethane foam including (1) selecting an isocyanate-terminated prepolymer containing less than 12% functionality, (2) providing a curative component comprising polyol, catalysts, including delayed action and standard catalyst, water, a surfactant, wherein the water comprises 1-5% of the curative (note examples 9-12 and column 7, lines 13-45), and (3) mixing the curative component and the prepolymer in an NCO/OH ratio of about 1:1 (column 4, lines 7-9). Mixing constituents of a curative component is well known and would have been obvious to one of ordinary skill in the art in order to prepare the curative component for reaction with the prepolymer.

Younes teaches the use of a mold, as in claim 2, and the formation of a tire, as in claims 4-5 and 15. Claims 4-5 also state an intended use for the formed elastomer, but these are not manipulative steps considered for distinguishing a "method of making or molding" claim over prior art. Appropriate heating and temperatures, as in claims 3 and 6, would be readily determined by one of ordinary skill in the art as part of process optimization. Younes also teaches the injection or introduction of gas, as in claim 7, at column 7, lines 40-42, the use of a

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prepolymer having an isocyanate concentration of less than 10%, as in claim 8, the water concentration, as in claim 9, and suggests surfactant, catalyst and NCO to OH concentrations of claims 10 and 12-13. The examples refer to the use of both positive and negative pressure during processing, as in claim 19.

8. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (703) 308-3462. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan Silbaugh, can be reached on (703) 308-3829. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Allan R. Kuhns
ALLAN R. KUHNS
PRIMARY EXAMINER AU 1732
8-12-02